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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHAFFER, ERIC T

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/604,503

Applicant(s)

MONTAGUE, JOHN E.

Examiner

Eric T. Shaffer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/27/00 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to the amendment filed December January 27, 2003.

Summary of Instant Office Action

2. Applicant's arguments, filed January 27, 2003, concerning claims 1 – 20, have been considered, deemed unpersuasive and are maintained.
3. None of the claims have been cancelled and claims 1, 4, 8 and 15 have been amended.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

5. **Claims 1 - 20** are rejected under 35 U.S.C. 102(e) as being anticipated by Thearling (US 6,240,411).

6. Claim 1 is a method of optimizing a campaign using a set of executable instructions, comprising: receiving a campaign operable to determine a success factor and a failure factor; This is anticipated by Thearling, which discloses "a simple form of query examining two fields within a table-age(to be greater than 25) and income(to be greater than thirty thousand dollars per year). An alternative is to show the current query being edited or constructed as a series of SQL (standard query language) statements" (column 5, lines 13 – 17) where the query that performs the division is a Boolean query to determine a success factor or failure factor. Success

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and failure factors are also quantified by Thearling, which discloses “if a model generates scores in a range from zero to one, the creator of the model might indicate that scores above 0.8 indicate a high likelihood that a customer will provide repeat business” (column 9, lines 49 - 52).

receiving a contact-list including a plurality of contacts each contact associated with one or more demographic attributes; The contacts list is anticipated by Thearling, which discloses “As described with reference to FIG. 4A, a part of the campaign management process is selecting subsets (or “contacts”) for further processing” (column 4, lines 60 - 62). That the contacts list is associated with attributes is also anticipated by Thearling, which discloses in Figure 5 that “a simple form of query examining two fields within a table-age (to be greater than 25) and income (to be greater than thirty thousand dollars per year)” (column 5, lines 12 - 15) where age and income are demographic attributes.

associating a completed contact list with each completed contact in the contact list and a remaining contact list with each non completed contact in the contact list; This is anticipated by Thearling, which discloses “In this case, an output data file could be formed that includes the name, an address field, and the particular value proposition (i.e. mailing a five dollar or ten dollar coupon). This output file could then be provided to the appropriate facility for taking the assigned action” (column 4, lines 44 - 48).

associating at least one of the success factor and the failure factor with each completed contact in the completed contact list; This is anticipated by Thearling, which discloses “A query is an inquiry, in any form, that can be used to classify or sort records. The queries step 44 may involve different ways of defining subsets of records in an input database. Thus, in FIG. 4B, a query might take all records for persons with an income over thirty thousand dollars. A second

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query 44b might select records of the database that have an income of over twenty five thousand dollars and an age of over 45. In this particular example, a person who is over 45 and has an income of over thirty thousand dollars would satisfy both the first query and the second query” (column 3, lines 54 - 65).

determining at configurable contact intervals from the completed contact list if a correlation exists between the completed contacts associated with the factors and one of more of the demographic attributes, wherein the contact intervals represent elapsed periods of time during the campaign; This is anticipated by Thearling, which discloses “A selected criteria, such as a query or ranking, is formed including a reference to the model. The reference is used to execute the model to score at least one of the plurality of records, and a selected set of records is selected from the database, each record of the selected set satisfying the query” (column 6, lines 20 - 23) and “if a model generates scores in a range from zero to one, the creator of the model might indicate that scores above 0.8 indicate a high likelihood that a customer will provide repeat business” (column 9, lines 49 - 52).

retrieving each contact in the remaining contact list based on the determined correlation. This is anticipated by Thearling, which discloses “The reference is used to execute the model to score at least one of the plurality of records, and a selected set of records is selected from the database, each record of the selected set satisfying the query” (column 6, lines 23 - 24).

7. Claim 2 is the method of claim 1, further comprising removing one or more selective contacts in the remaining contact list based on an unfavorable value of the correlation which is associated with one or more of the selective contacts. This is anticipated by Thearling, which discloses “a part of the campaign management process is selecting subsets (or “contacts”) for

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further processing” (column 4, lines 60 - 62) and “a result table could be built by removing those records satisfying the income test from a restricted table used for model evaluation. In this case, when the restricted table is built, the OR query could first be formulated at a temporary table storing the results of the first portion of the query” (column 11, lines 58 - 64). 8. Claim 3 is the method of claim 1, further comprising: initiating at one or more intervals the step for determining the correlation. This is anticipated by Thearling, which discloses “The queries step 44 may involve different ways of defining subsets of records in an input database. Thus, in FIG. 4B, a query 1 44a might take all records for persons with an income over thirty thousand dollars. A second query 44b might select records of the database that have an income of over twenty five thousand dollars and an age of over 45. In this particular example, a person who is over 45 and has an income of over thirty thousand dollars would satisfy both the first query and the second query” (column 3, lines 57 - 65), where the two queries represent the two intervals.

9. Claim 4 is the method of claim 3, further comprising: dynamically adjusting the intervals if no substantial correlation is determined. Additional intervals can be added or adjusted by executing an “OR” within a query and this is anticipated by Thearling, which discloses “a Boolean and/or decision tree can be built for a query with leaves of the tree including nt only field comparisons with other fields or values, but also a comparison of model scores with other fields, model scores or values” (column 8, lines 38 - 42).

10. Claim 5 is the method of claim 1, further comprising: randomly seeding the retrieved remaining contact list with an adjustable percentage of non-completed contacts without regard for the determined correlation. This is anticipated by Thearling, which discloses “In the split step, the records that satisfy any applicable preceding query or queries may be divided. The

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division may, for example, be a random division based on percentage. Thus, at step 46a of FIG. 4B, a random 95% to 5% split is performed” (column 3, lines 17 -21).

11. Claim 6 is the method in claim 5 further comprising: re-determining the correlation to discover if as a result of randomly seeding a modified correlation is detected. This is anticipated by Thearling, which discloses “In the split step, the records that satisfy any applicable preceding query or queries may be divided. The division may, for example, be a random division based on percentage. Thus, at step 46a of FIG. 4B, a random 95% to 5% split is performed” (column 3, lines 17 -21).

retrieving each remaining contact in the remaining contact list based on the modified correlation. This is anticipated by Thearling, which discloses “At step 46b, no split is effectively performed--all of the records satisfying the second query at 44b are passed along through the step illustrated at 46b”(column 3, lines 21 - 23).

12. Claim 7 is the method of claim 1, further comprising:

discarding remaining contacts in the remaining contact list having unfavorable demographics with respect to the determined correlation; This is anticipated by Thearling, which discloses “At a step 47b, an alternative action might be to take no action at all--and any record falling into this class would be assigned a value corresponding to taking no action” (column 4, lines 30 - 33).

acquiring one or more new contacts not originally associated with the contact list, each new contact having favorable demographics with respect to the determined correlation and each new contact sorted into the remaining contact list. This is anticipated by Thearling, which discloses “In a system including ranking based on model scores, the selection criteria, or query,

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processor 122 may similarly invoke the data mining engine 124 to process the model reference.”
(column 15, lines 56 - 58).

13. Claim 8 is a system for optimizing campaigns, comprising:

a campaign optimizer comprising executable instructions operable to communicate with one or more contact data stores, the data stores associated with at least one of one or more completed contacts and one or more non completed contacts, the campaign optimizer operable to receive completed contacts at adjustable time intervals; This is anticipated by Thearling, which discloses “First, the known or determinable portions of the query are evaluated. Accordingly, a table 102 is built that includes only those records that meet the (age greater than 30) and (state=cal) portion of the query. This table may include either the entire record, or only a "tag," i.e., an identifier for the corresponding record (e.g., in a database including customers, social security number or the unique name of the customer could be used as a "tag"; when processing is complete, the other fields of the record necessary for further action could be determined from a larger table using the table with the tag id's for identifying the records that include the larger set of fields)” (column 12, lines 35 - 38).

a correlator comprising executable instructions operable to communicate with the campaign optimizer, to receive the completed contacts, and to determine if a correlation associated with the completed contacts exist between the completed contacts identified with at least one of a success factor and a failure factor and one or more demographic attributes, and wherein the correlator determines the correlation during each of the adjustable time intervals; This is anticipated by Thearling, which discloses “the present invention, a method of classifying a plurality of records in a database is disclosed. According to this embodiment, a model for

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ascertaining a characteristic of records in a database is provided. A selected criteria, such as a query or ranking, is formed including a reference to the model” (column 6, lines 17 - 21). In this embodiment, characteristics of records is synonymous with demographic attributes and ranking is synonymous with correlation, where higher rank is higher correlation.

a non completed contact sorter comprising executable instructions operable to communicate with the correlator, one or more of the data stores, and the campaign optimizer, the non completed contacts sorter operable to sort non completed contacts in one or more of the data stores based on the correlation. This is anticipated by Thearling, which discloses “further process the models scores to produce a temporary table that includes only records satisfying the query element involving the model” (column 15, lines 46 - 48) where query element is synonymous with executable instructions.

14. Claim 9 is the system of claim 8, wherein the correlator is operable to determine a correlation coefficient for each of the demographic attributes. This is anticipated by Thearling, which discloses “a table can be built including records that only have a model score of greater than 0.7” (column 12, lines 59 - 63) and Figure 3.

15. Claim 10 is the system of claim 8, wherein the contacts are associated with an outbound contact campaign. This is anticipated by Thearling, which discloses “In this embodiment, the data warehouse 125 stores the database tables, e.g., all of the tables storing customer information for a marketing campaign” (column 15, lines 4 - 6).

16. Claim 11 is the system of claim 8, further comprising: an outcome analyzer comprising executable instructions operable to determine upon completion of one or more of the completed contacts if the completed contact is associated with at least one of the success factor

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and the failure factor. This is anticipated by Thearling, which discloses "The campaign manager 121 may include (in addition to other components for performing the campaign management functions described above (not shown)), a query processor 122. In this embodiment, the query processor is responsible for controlling evaluation of a query, e.g., parsing a Boolean tree as generally described above. When being used, a query with model reference or references 123 may be input into the query processor" (column 14, lines 60 - 67), where a parsing query processor is synonymous with executable instructions and references are synonymous with contacts.

17. Claim 12 is the system of claim 8, further comprising an optimization manager comprising executable instructions operable to randomly seed the non-completed contacts in one or more of the data stores with a percentage of non-completed contacts without regard to the correlation. This is anticipated by Thearling, which discloses "In the split step, the records that satisfy any applicable preceding query or queries may be divided. The division may, for example, be a random division based on percentage. Thus, at step 46a of FIG. 4B, a random 95% to 5% split is performed" (column 3, lines 17 -21).

18. Claim 13 is the system of claim 12, wherein the optimization manager is operable to communicate with the correlator to re-determine a modified correlation based on completed contacts associated with the randomly seeded contacts. This is anticipated by Thearling, which discloses "a part of the campaign management process is selecting subsets (or "contacts") for further processing" (column 4, lines 60 - 62).

19. Claim 14 is the system of claim 13, wherein the optimization manager is operable to communicate to the non completed contacts sorter the modified correlation resulting a resort of

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the non completed contacts in one or more of the data stores based on the modified correlation.

This is anticipated by Thearling, which discloses "According to this embodiment, a model for ascertaining a characteristic of records in a database is provided. A selected criteria, such as a query or ranking, is formed including a reference to the model. The reference is used to execute the model to score at least one of the plurality of records, and a selected set of records is selected from the database, each record of the selected set satisfying the query." (column 6, lines 18 - 25).

20. Claim 15 is a method of optimizing a contact list during a campaign using a set of executable instructions, comprising:

identifying a contact campaign; This is anticipated by Thearling, which discloses "The purpose of campaign management is to select and categorize the records of the database (e.g., a corresponding row, such as 31b, 31c, 31d or 31e) for a variety of actions (or create a "segment" or segments of the database for action)" (column 3, lines 11 - 13).

receiving a contact list including completed contacts and non completed contacts, each of the contacts associated with a success factor, a failure factor, and one or more demographic attributes; This is anticipated by Thearling, which discloses "a step 42, a de-duplication (or "de dupe") may be performed. This step may be best understood with the following step, 44, where queries are performed. A query is an inquiry, in any form, that can be used to classify or sort records. The queries step 44 may involve different ways of defining subsets of records in an input database. Thus, in FIG. 4B, a query 1 44a might take all records for persons with an income over thirty thousand dollars. A second query 44b might select records of the database that have an income of over twenty five thousand dollars and an age of over 45. In this particular

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example, a person who is over 45 and has an income of over thirty thousand dollars would satisfy both the first query and the second query” (column 3, lines 53 - 65).

determining during the contact campaign at adjustable intervals a correlation between the factors and one or more of the demographic attributes of the completed contacts; This is anticipated by Thearling, which discloses “Thus, if a model generates scores in a range from zero to one, the creator of the model might indicate that scores above 0.8 indicate a high likelihood that a customer will provide repeat business (column 3, lines 53 - 65).

reordering during the contact campaign the non completed contacts based on the correlation. This is anticipated by Thearling, which discloses “a model for ascertaining a characteristic of records in a database is provided. A selected criteria, such as a query or ranking, is formed including a reference to the model” (column 6, lines 18 - 21).

21. Claim 16 is the method of claim 15 further comprising seeding in random order an adjustable percentage of the non completed contacts without regard for the correlation. This is anticipated by Thearling, which discloses “In the split step, the records that satisfy any applicable preceding query or queries may be divided. The division may, for example, be a random division based on percentage. Thus, at step 46a of FIG. 4B, a random 95% to 5% split is performed” (column 3, lines 17 -21).

22. Claim 17 is the method of claim 16, further comprising:

determining a new correlation by evaluating the factors and one or more of the demographic attributes for completed contacts after the seeding step; This is anticipated by Thearling, which discloses “One or more of the fields may correspond to a characteristic

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computed according to one of the above models generated through data mining or other technique, e.g. column 32d having a score” (column 3, lines 7 - 9).

reordering the non completed contacts based on the new correlation. This is anticipated by Thearling, which discloses “The purpose of campaign management is to select and categorize the records of the database” (column 3, lines 11 -13).

23. Claim 18 is the method of claim 15, further comprising receiving a reference operable to modify and retrieve one or more contact data records from one or more data stores associated with each of the contacts. This is anticipated by Thearling, which discloses “Additions or alterations to the current query being edited can be done with a separate pop-up tool bar 54a-54h. Thus, a cursor marker (not shown) present in the current query 55 could indicate where additional query language commands could be inserted” (column 5, lines 39 - 43) and features an example of the screen from which said queries can be executed in Figure 5.

24. Claim 19 is the method of claim 15, further comprising reporting summary data associated with the contact campaign. This is anticipated by Thearling, which discloses “first extract for 48a may be formed in the example of FIG. 4B for providing a file to a mail order house that would arrange for mailing of appropriate coupons. In this case, an output data file could be formed that includes the name, an address field, and the particular value proposition (i.e. mailing a five dollar or ten dollar coupon)” (column 4, lines 40 - 47).

25. Claim 20 is the method of claim 15, wherein the contact campaign is conducted over at least one of an e-mail channel, an on-line chat channel, a voice channel, a video channel, an audio channel, a kiosk channel, an ATM channel, and a wireless channel. A contact conducted over a voice channel is anticipated by Thearling, which discloses “Action 1 36a may correspond

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to sending a person a coupon through the mail. Action 2 36b may correspond to making a telephone call to the individual” (column 3, lines 20 - 22).

Response to Arguments

26. Applicant’s arguments filed January 27, 2003 have been fully considered, but the same are not persuasive.

The applicant argues that the Thearling reference does not consider the time interval between the individual instances of the correlation determination calculation in order to reflect and measure the dynamically changing environment. However, Thearling does in fact teach the measurement and influence of time on the calculations necessary to analyze and score a record by reciting “whether this results in a computational savings or not may depend on the individual query and the amount of time necessary for the model to score a record within the database” (column 14, lines 27 - 29), where the amount of time necessary is in fact an interval of time.

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Conclusion

27. Applicant's amendment necessitates the new ground(s) of rejection presented in this Office Action. Accordingly, THIS ACTION IS MADE FINAL. See MPEM 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of final action.

28. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric Shaffer whose telephone number is (703) 305-5283. The Examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax number for the organization is (703) 305-0040/308-6306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 305-3900.

Eric Shaffer

March 10, 2003


TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600